

EXHIBIT 19

Frostite Deposit
Samples


NATIONAL
23-681
Made in U. S. A.



walter c. mccrone associates, inc.

CONSULTING: ULTRAMICROANALYSIS • MICROSCOPY • SMALL PARTICLE PROBLEMS • SOLID-STATE CHEMISTRY

11 March 1974

Dr. Robert Rolle
Johnson and Johnson Research Center
501 George Street
New Brunswick, NJ 08901

Dear Dr. Rolle:

On rereading the letter report that Rich Shimp sent to you on 11 February 1974, I agree that the statement on the chrysotile content of the sample does need some amplification. The actual number of fibers which we observed on the entire grid was about 4 or 5 and although our blank samples normally show no chrysotile fibers it should be remembered that chrysotile is a ubiquitous mineral in the atmosphere and water around us. Other laboratories working with asbestos have reported background levels on their electron microscope grids varying from about 1 or 2 chrysotile fibers per grid up to about 50 fibers per grid square, and there are between 100 and 200 grid squares on the total grid. Thus, their background level, though admittedly they are working continually with chrysotile asbestos, could be 1000 times higher than the level which we have detected in this sample.

We believe that the fibers which we did detect, however, in view of our record of zero blanks, do represent a content of chrysotile in the sample as we received it. It should also be borne in mind, however, what the history of the sample may have been prior to our receiving it. I have no doubt that in its passage from the mine to your processing plant to us there have been stages at which a potential exposure to the atmosphere, and hence potential exposure to chrysotile fibrils, has occurred, and I doubt whether such accidental exposure can be totally avoided.

In summary, then, we believe that the chrysotile fibrils which we observed in your sample were truly in the sample and did not arise as a result of our background contamination. We do not, however, believe that there is a significant content in the sample nor can we say that it is definitely a constituent of the talc; in fact, the morphology of the chrysotile present might be more indicative of an ambient contamination. I feel that one must always keep in mind the extensive use of chrysotile and the fact that no matter what material one looks at, the more samples we examine the greater the probability that at some time we will encounter stray chrysotile fibrils.

Dr. Robert Rolle
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As it is your intention to send us a series of samples over a period of time, I believe it is more logical at the present time merely to note that last sample as an occurrence of less than 5 parts per million, possibly environmental contamination, and wait until we have the over-view the later samples will present us.

Yours sincerely,

Iam M. Stewart
Iam M. Stewart
Manager, Electron Optics Group

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